WHAT IS CLAIMED IS:

1. A photothermographic material comprising at least (a) a photosensitive silver halide, (b) a reducible silver salt, (c) a reducing compound represented by the following general formula (1), and (d) a binder:

Formula (1): $Q^1$-NHNH-$R^1$

wherein, in the general formula (1), $Q^1$ represents a 5- to 7-membered unsaturated ring bonding to NHNH-$R^1$ at a carbon atom, and $R^1$ represents a carbamoyl group, an acyl group, an alkoxycarbonyl group, an aryloxycarbonyl group, a sulfonyl group or a sulfamoyl group, provided that when $R^1$ is propylcarbamoyl group, $Q^1$ is not 2,3,5,6-tetrachloro-4-cyanophenyl group.

2. The photothermographic material according to Claim 1, wherein, in the compound represented by the general formula (1), $R^1$ represents a substituted carbamoyl group.

3. The photothermographic material according to Claim 1, wherein, in the compound represented by the general formula (1), $Q^1$ represents a substituted phenyl group in which the sum of Hammett σp values of the substituents on the phenyl group is 1.6 or more.

4. The photothermographic material according to Claim 3, wherein, in the compound represented by the general formula (1), $Q^1$ represents a substituted phenyl group in which the sum of Hammett σp values of the substituents on the phenyl group is 1.6 or more, $R^1$ is a substituted carbamoyl group represented by -C(=O)-NH-$R^{11}$ and $R^{11}$ is an alkyl or aryl group having 1-10 carbon atoms.

5. The photothermographic material according to Claim 1, wherein, in the compound represented by the general formula (1), $Q^1$ represents a 5- to 7-membered unsaturated heteroring bonding to NHNH-$R^1$ at a carbon atom.

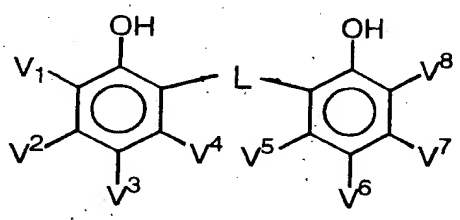
6. The photothermographic material according to Claim 5, wherein, in the compound represented by the general formula (1), $Q^1$ represents a quinazoline ring bonding to NHNH-$R^1$ at a carbon atom.

7. The photothermographic material according to Claim 6, wherein, in the compound represented by the general formula (1), $Q^1$ represents a quinazoline ring bonding to NHNH-$R^1$ at a carbon atom, $R^1$ is a substituted carbamoyl group represented by $-C(=O)-NH-R^{11}$ and $R^{11}$ is an alkyl group or an aryl group having 1-10 carbon atoms.

8. The photothermographic material according to Claim 1, wherein the compound represented by the general formula (1) does not function as an ultrahigh contrast agent.

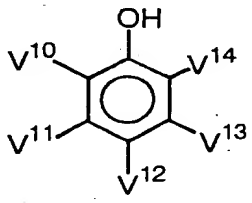
9. The photothermographic material according to Claim 1, which further contains (e) a compound represented by the general following formula (2) or (3) on the same surface of the support:

Formula (2)




wherein, in the general formula (2), $V^1$ to $V^8$ each independently represent hydrogen atom or a substituent, and L represents a bridging group consisting of $-CH(V^9)-$ or $-S-$ where $V^9$ represents hydrogen atom or a substituent:

Formula (3)



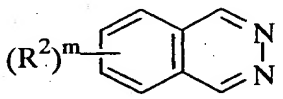
wherein, in the general formula (3), $V^{10}$ to $V^{14}$ each independently represent hydrogen atom or a substituent.

10. The photothermographic material according to Claim 9, wherein the amount of the compound represented by the general formula (1) is 0.1-10 mole % of the amount of the compound represented by the general formula (2) or (3).

11. The photothermographic material according to Claim 9, which further comprises (g) a hydrogen bond-forming compound on the same surface of the support.

12. The photothermographic material according to Claim 1, which further comprises (f) a compound represented by the general formula (4) on the same surface of the support:

Formula (4)



wherein, in the general formula (4), $R^2$ represents hydrogen atom or a monovalent substituent, m represents an integer of 1 to 6 where $(R^2)m$ means that 1-6 of Y independently exist on the phthalazine ring, and when m is 2 or more, adjacent two of $R^2$ may form an aliphatic ring or an aromatic ring.

13. The photothermographic material according to Claim 12, wherein, in the general formula (4), $R^2$ represents a monovalent substituent, and m represents an integer of 1 to 6.

14. The photothermographic material according to Claim 1, wherein (b) the reducible silver salt is a silver salt of a long chain aliphatic carboxylic acid.

15. A method for forming images, which comprises developing a photothermographic material according to Claim 1 by heating to form a silver image.

16. The method for forming images according to Claim 15, wherein the heat development is performed at a temperature of 100-117°C.

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